understood by referring to Fig. 12. The fixture consists of a base *C* which carries a slide *D,* set at an angle of about 30 degrees with the base. The V-block *E* supports the work, which is held between the angle-plates *F* and *G.* Plate *F* forms a stop for the work, while plate *G* is milled to make provision for the insertion of the wedge *E.* The hand-lever *J* is more clearly shown in Fig. n. To operate this fixture, which may be used on any milling machine, the cutter *K* is placed in the horizontal spindle of the machine, and the fixture set up facing it. The method of holding the bushing during the machining of the groove is apparent from the illustrations, which show it seated in the V-block and held firmly between the angle-

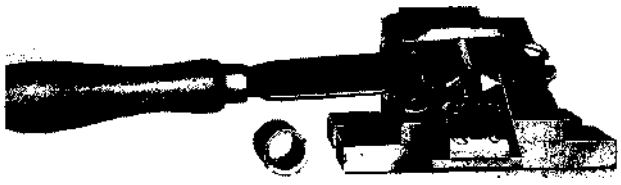

Fig. **11.** Fixture for Holding Bushings when Milling Oil-groove

plates by the wedge. After the wedge has been driven into place, the cutter is fed into the work to the required depth, and slide *D* is operated by means of hand-lever *J* advancing the bushing until the proper length of groove has been milled.

This fixture could no doubt be greatly improved upon by the addition of better means of clamping the work, and could

also be made to handle a wider range of work by the addition of suitable stops for controlling the length of the cut. However, for the particular work for which the fixture was designed, this was not thought necessary, as the quantity of pieces to be machined did not warrant it.

Indexing Milling Fixture for Roller Separator. — The bronze roller separators seen in Fig. 13 form part of the roller bearing of a gun mount upon which the carriage turns when train-